# WHERE RUBBER FOR

Para From South America Is the Best Grade Makers Know.

WILD AND CULTIVATED

there has been no cultivation process. rubber is cleaner and contains less for Such trees and shrubs are found mostly eign matter than the wild Para. The

The finest rubber in the world has until recently been obtained from the Amazon region of South America, and is known as Fine Para. For over a century this rubber has been gathered in practically the same way. The native goes into the forest, selects a tree, cuts "V" shaped grooves in the bark with a knife made for the purpose, the grooves being cut in herringbone fashion around the tree, with one main groove down the center like the main vein in a leaf. The latex of the tree (not the sap) flows from the smaller veins and down the center like the main vein in a leaf. The latex of the tree (not the sap) flows from the smaller veins and down the center like the main vein in a leaf. The latex of the tree (not the sap) flows from the smaller veins and down the center like the main vein in a leaf. The latex of the tree (not the sap) flows from the smaller veins and down the center like the main vein in a leaf. The latex of the tree (not the sap) flows from the grooves are the cultivated Castilloa.

The price of crude rubber is not only of importance to the manufacturer but also to the consumer, as the prices of the various rubber products are based on the cost of the crude article, and the two vary alike. As the crude rubber market is controlled by foreign speculators, the price depends on the supply and demand and is always variable. Recently Para was down to nearly 50 cents a pound, and in 1910 the price of

When the little cups are full they are gathered and brought into the rubber camp and there the latex is coagulated by means of smoke. This is done by the use of a paddle which is alternately dipped into a bowl of the latex and then revolved in the smoke from a wood or palm nut fire. This smoke seems to have

A trip of peculiar charm is along the west of the Hudson River to Newburgh, from Newburgh to Beacon and over the mountains to Pawling and thence down the Harlem valley, through the New York watershed district to Beaford, Chappaqua and Port Chester, returning to New York from that point via the old Boston Post Foat. It is outlined by the Bureau of Tours of the Automobile Club of America.

that point via the old Boston Post It is outlined by the Bureau of of the Automobile Club of America. It is outlined by the Bureau of of the Automobile Club of America. It is outlined by the Bureau of the Automobile Club of America. It is on account of sewer construction the Forty-second street ferry should ken to Weehawken. From the ferry should have an indicated a street for the ferry road, pass Fairview Cemela, down hill winding, at foot of urn right 6.0, follow trolley, cross at Ridgefield 2.9. Take left fork 7.0 and Morzemere 8.0 and Palisade Park Leonia 9.4. Here turn left. Cross 2.1. cross bridge 8.4, cross railroad of the railroad at Bogota 10.4, bridge 10.7, bear right into Street, turn right into Main 11.0 in Hackensack, cross railroad on left into Passaic street 11.8, cross di 12.9, cross trolley at Arcola 14.8, ater wheel turn left in Arcola 15.5, bridge and internal form of the form of the bridge and internal form of the form of the bridge and internal left in Arcola 15.5, bridge and internal form of the form of the bridge and internal form of the form

wheel turn left in Arcola 15.5.

up a certain plant which grows in the Castilloa districts. After being mixed with this plant juice the Castilloa is TIRES COMES FROM

spread out in sheets on bull hides, where it is allowed to dry in the sun, after which the rubber is rolled up and is ready for shipment. Castilloa is gathered mostly from wild trees, but in Mexico it has recently been cultivated to some extent.

From central Africa and from Borneo come the so-called African gums, such

From central Africa and from Borneo come the so-called African gums, such as Congo, Soudan, Masai, Laponi, Mancoba, Pontianac, etc. Some of these rubbers are gathered from trees, but most of them from vines and roots, and the methods of coagulation are varied. Practically all of them are dried out in the sun. These rubbers are all of lower grade than the Para rubbers of South America.

Crude rubber, its source of supply, and the conditions governing its progress from the source to American tire factories, are subjects of interest to motorists in this country, says the Goodyear Tire & Rubber Co. Crude rubber is a vegetable product gathered from certain species of tropical trees, shrubs, vines and roots. It was first introduced into Europe in 1735. It was first used for pencil erasers and in waterproof cloth, and finally, in solution, in cements. Vulcanizing, or curing rubber, was discovered in 1844, and thereafter the development of the industry was but an infant in size, the latter of supplies that the Para rubbers of South America. Cultivated rubbers are obtained from East India, Ceylon, Malayan Peninsula and best among these is the Ceylon rubber, which has been grown mostly from sprouts taken from the wild Para rubber trees of South America. These cultivated rubbers are obtained from Last India, Ceylon, Malayan Peninsula and southern Mexico. The chief and best among these is the Ceylon rubber, which has been grown mostly from sprouts taken from the wild Para rubber deat India, Ceylon, Malayan Peninsula and southern Mexico. The chief and best among these is the Ceylon rubber, which has been grown mostly from sprouts taken from the wild Para rubber and best among these is the Ceylon rubber, which has been grown mostly from sprouts taken from the wild Para rubber and best among these is the Ceylon mostly from sprouts taken from the wild Para rubber trees of South America.

The chief and best among these is the Ceylon mostly from sprouts taken from the wild Para rubber trees of South America.

ment of the industry was rapid—though the industry was but an infant in size, compared with now, up to the development of the automobile industry.

There are many kinds and grades of rubber, and these can to-day be divided into two chief classes—wild and cultivated. The former is collected from trees that have grown wild and where there has been no cultivation process.

Of late Far East rubber has been taking the rubber is an outer from the plantation to the rubber manufacturer.

Of late Far East rubber has been taking the rubber is an outer from the plantation to the rubber is an outer from the plantation rubber is cleaner and contains less for eight matter than the wild Para. The

northern South America, Central continued rubbers grown in East India rica, Mexico, central Africa and and the Malayan Peninsula are similar imerica. Mexico, central Africa and to the Malayan Feminaula are simulated forneo.

The finest rubber in the world has under the general head of Ceylon rubber.

From southern Mexico, as heretofore mentioned, comes the cultivated Castil-

ter vein into a little cup placed to re-ceive it. cents a pound, and in 1910 the price of the same went up to \$3.02 a pound.

#### EMPIRE FACTORY GROWS.

More Room Needed Because Tire Production Is Going So Fast.

it was then decided to go the full limit and make casings of the same material. The result is the pioneer red rubber tire. The Empire Rubber and Tire Company reservative effect on the rubber as of Trenton, N. J., is making alterations as drying it out and causing it to and extensions in its plant. One new well as drying it out and causing it to harden on the paddle, each successive layer of the latex causing the size of the rubber ball or biscuit to increase. When a biscuit of sufficient size has been coagulated it is removed from the paddle and is ready for shipment to the various countries where rubber products are manufactured.

Another important grade of rubber coming from South America is Caucho. This tree grows similar to the Para itree grows manufactured.

The company's sales of last year. In actual use red tires have made good promises of durability and mileage. The company's sales of last year were made in large proportion to allowing the whole to dry out, in almost any form, in the sun. The value of this proved methods of coagulation.

From Central America comes the Castilloa rubber. This rubber is gathered from trees in a manner similar to Para, and is coagulated by being mixed with fully welcomed as customers. For the company likes to submit its product to the judgment of those wing tire values.

The complete red rubber tube rice representations in the plant. One new building is also being the building department the pressure on the facilities of the Empire factory is proof of the satisfaction afforded by Empire tires made in large proportion to allowing the whole to dry out, in almost any form, in the sun. The value of this proved methods of coagulation.

From Central America comes the Castilloa rubber. This rubber is gathered from trees in a manner similar to Para, and is coagulated by being mixed with the pressure on the facilities of the Empire factory is proof of the satisfaction afforded by Empire tires water the demand. The pressure on the facilities of the Empire factory is proof of the satisfaction afforded by Empire tires water the demand. The pressure on the

"SUN" READERS' TOURING QUERIES ANSWERED

questions in to the Automobile Editor, THE SUN. 170 Nassau street. It will facilitate answering if all questions are in by Thursday evening. The Touring Bureau of the Automobile Club of America is cooperating with THE SUN in furnishing this information. Suggestions and information will be wel-

**NEWBURGH** 

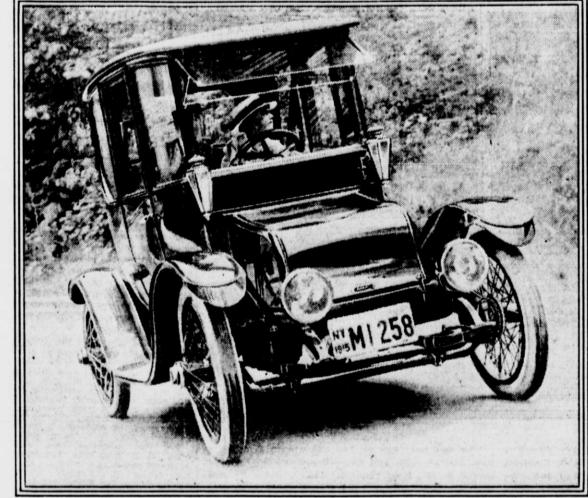
Highland Woodbury
Mills Central

Southfields

Mountainville of

Harriman Valley

ELECTRIC DOES HILL CLIMBING. TOO



Here is a Baker lightweight electric going up Abbey Hill. Its fair driver said the climb was made

sented to the public by this company

It had such success that the company abandoned gray rubber tubes entirely. The results continued to be so good that

WHERE TO LUBRICATE.

#### WHEEL CHAIR IS PUT INTO MOTOR CLASS

Battery Driven Machines, as Used on the Coast, Replace

"Afromobiles."

## Notes of Live Interest to the Motor Trade, Local and Foreign

The month of April was the second largest month in point of business in the history of the Chalmers Motor Company, Indications are that May will show the largest business the Chalmers has ever enjoyed.

It is stated that no less the power is obtained at 5,000 in

**BIG DEVELOPMENTS** 

IN MOTOR BUILDING

Henry B. Joy Reviews Briefly

the Automobile Industry

of the U.S.

By HENRY B. JOY,

President Packard Motor Car

Company.

A student of the trend of the motor

car art has seen a wonderful evolution

in the past twenty years. The auto-

mobile has been as epoch making in the

world's history as has any other single

step of man's ingenious progress. My

father, who died in 1896, never saw

a motor car. To-day horses are prac-

To-day we talk from New York to

tically relegated to the "Zoo."

of the F. B. Stearns Company, makers of Stearns-Knight cars, who was in Cleveland last week, reported that his actual deliveries to date for the past year amounted last week, reported that his actual deliveries to date for the past year amounted to \$500,000. "Furnish me the cars and I'll beat the past year's record," he told Frank B. Stearns during Mrs. Macalman was accompanied by Mrs. Macalman. They were the guests of Mrs. and Mrs. Frank B. Stearns during their visit to Cleveland. The four left for a motor trip to Boston early last Friday, travelling through the Alleghany and which have been equipped with Ajax tires. He has a very large family and many dependents to tote around and the cars and tires will both be tested to their limits no doubt.

Or the F. B. Stearns Company, makers of Steath cars, who was in Cleveland death cars and trips to the past year's necord," he told Frank B. Stearns and I'll beat the past year's record," he told Frank B. Stearns during their visit to Cleveland. The four left for a motor trip to Boston early last Friday, travelling through the Alleghany and white Mountains.

The 1916 Marion is a light six cylinder car, weighing 2,600 pounds, with a wheel has arrived at the Panama-Pacific Exposition grounds after trucks and the third carrived by Foertner states that Miss delivered to a motorist of Renc.

Another telegram from San Francisco over the source over the deep shows of the Sierns Mountains. Two of Mrs. and Mrs. Frank B. Stearns during their visit to Cleveland. The four left for a motor trip to Boston early last Friday and which have been equipped with Ajax tires. He has a very large family and many dependents to tote around and the control of the same triple of the same triple and the strenous trip from San Francisco over the steeps of the snows of the Sierns to the

#### Exit the Tester: His Job Has Gone

THE ruddy faced tester of motor chassis, an auditory specialist, performing behind a palpitating motor, has passed. They have taken him from the highway and placed his pet motors on motor jacks inside the factory. Instead of flying fence posts the "daredevil" watches a slow moving meter hand.

The Packard Motor Car Company has a system of inside testing under which the human element is largely removed. The newly assembled car or truck motor is tested out first under belt and its action gauged on the wattmeter. After this process the motor goes to the dynamometer, San Francisco. To-day man makes his way by motor car from coast to coast in fifteen days over the rapidly improving Lincoln Way without attracting particular attention.

The progressive evolution of mechanical charges is placed. where it is rated under its own gasolene power. When the motor has passed inspection the various adjustments are sealed, and they remain so until the car is cal, chemical, electrical science is plac-ing in the possession of the people of the earth daily more development than ocdelivered to the owner.

call, chemical, electrical science, and the people of the earth daily more development than occurred in each thousand years prior to the last century.

The motor car reached the stage of practicall use first in Europe. Practically use first in Europe. Practically

and American cheap utility cars supply the world. The current year will see can be removed without removing rear some big developments.

automobile upholstery which, according every respect than the leather which w come universal. Instead of using make- the past two or three years many motor car builders already have adopted a high grade of waterproof cloth, declaring that it is even better from the standpoints of wear and comfort than the best leather they could grain side in order to m

While it was not difficult to secure enough leather for uphoistering the 50, 600 cars built a few years ago, the difficulty in securing an ample supply has steadily increased until this year, when it is expected that fully half a million cars will be produced in this country.

### TRUE ACCESSIBILITY RARE IN MOTOR CARS

Quality Sought by Motorists of Experience, Says Studebaker Man.

True accessibility in motor car con struction is so rare, as was pointed out In THE SUN last Sunday, that the buyer of his "second car" puts in a lot of time on mechanical features, and so does the intending new motorist if he has had

This has been the experience of Winfield S. Jewell, the local Studebaker retail manager. .

"The questions of the man who will take care of the car himself, while dealing also with gasolene and tires, I find are concerned largely with accessibility." this. The first is he wants to know how much trouble he will have in going over his motor and transmission himself. He knows there are inevitable adjustments to be made, and he wants a machine that will give him the maximum of ac-

from America.

Our American motor car manufacturers have outstripped the world in quantity and quality and perfection of details of finish and equipment. American high class cars have no peers abroad and American chean utility cars supply made that shalls, geers and learnings.

The scarcity of good leather, com-"Cloth upholstery is far

enough. The two or three

PAY NO MORE



#### ater wheel turn left in Arcola 15.5, bridge and turn right 15.6, bear 15.9 fallow wires, hear right 18.2, a should be used in crossing 18.5. Go straight on South Pressect, turn right into South Maple 19.5, cross Main street in Ridge-Go straight on to the end of the nd at hotel turn left in Hohokus cost railroad 22.1 through Waldwick Miendale 23.5, Ramsey 25.5 and 128.1. Take left fork with trolley ass Lafayette avenue. Cross railled turn left in Suffern. TUXEDO Cors. Chappaqua 1844. Sloatsburg sh 2s.1. Take left fork with trolley bass Lafayette avenue. Cross railand turn left in Suffern. Ramapo Valley buffern the famous Ramapo Valley red and the Ramapo range of mounis skirted to Tuxedo. Beautiful of the mountains and the foothills. From Suffern take right fork ross railroad 30.9, cross bridge 31.2 of straight on through Ramapo 31.8, railroad 33.2 and go straight on Sioutsburg 33.6. At station bear a Tuxedo. Tuxedo, turn right 3s.6. Bear right Ramsey Allendale Mamaroneck Ridgewood Tuxedo turn right 38.6. Hear right trained turn right in Southfield ike right fork 45.2 and use caution, should also be used in turning dier railroad at station 45.7. bear take left fork in Central Vailey go straight on through Highland 2. Use caution in going under in Woodbury 50.5. bear left, cross bridge mill bear right in Mountainville four right 54.2 and take right. Turn right 56.4 and go straight unth Cornwall. Cross bridge at a take left fork 57.8, cross rail-Moodna 59.0. Take right fork sa bridge 59.3, take left fork 68.3 stery turn right 60.8, at second go straight on 61.6, cross bridge. Failroad 61.9 and go straight on eat, turn right into Broadway go straight on to Grand street urgh. turn right 38.6. Bear right bear right in Southfield New Rochelle HACKENŠACK YORK OF AMERICA

Greenhaven

Willage Wiccopee

Beacon

SUREAU OF TOURS

We straight on to Grand street

Sh.

St hus far are open and in fair

excepting that they are some

the running through some of

Newburgh is a historic city.

The straight of the straight o

PORT CHESTER COMPILED BY
THE AUTOMOBILE CLUB BUREAU OF TOURS

BREWSTER

Newcastle

Goldens Bridge

BEDFORD

chines in use and next year the number will pass the 2,000,000 mark. This great expansion of the automobile business will require millions of additional tiros."

J. H. MacAlman, Boston representative of the F. B. Stearns Company, makers of distributers for Jeffery and National estempts, who was in Cleveland last that there Jeffery quad trucks multiple tiros. The stearns the stearns to date for the past year amounted to \$500,000.

The whole have all Asserts CSL. Have been all the second of the control of the co